

AMENDMENTS TO THE CLAIMS

Please amend the claims as indicated below.

1. (Currently Amended) A composition comprising at least one of hydrolysates or condensates of epoxy-and silane-functional oligomers and polymers, prepared by at least one of hydrolyzing or condensing at least one of an oligomer or polymer (A), wherein the oligomer or polymer (A) is selected from the group consisting of copolymers of olefinically unsaturated monomers, containing at least one epoxide group (a1) and at least one hydrolyzable silane group (a2), wherein the number-average molecular weight of the oligomer or polymer (A) is from 800 to 3000 daltons, wherein the composition is characterized in being prepared hydrolyzing or condensing is conducted in the presence of at least one kind of nanoparticles having a primary particle size of from 5 to 50 nm, which nanoparticles are metals of oxides, oxide hydrates, sulfates, hydroxides or phosphates oxides, and wherein the metals are selected from the group consisting of boron, aluminum, gallium, silicon, germanium, tin, arsenic, antimony, silver, zinc, titanium, zirconium, hafnium, vanadium, niobium, tantalum, molybdenum, tungsten, and cerium, and wherein the hydrolysis and/or condensation takes place in a sol-gel process by reaction with water in the presence of an organic or inorganic acid...
2. (Currently Amended) The ~~compositions~~ composition as claimed in claim 1, wherein the at least one oligomer or polymer (A) is condensed by means of a sol-gel process.
3. (Currently Amended) The ~~compositions~~ composition as claimed in claim 1, prepared by at least one of ~~hydrolysis or hydrolysis and condensation of the at least one~~ hydrolyzing or condensing an oligomer ~~or polymer~~ (A).
- 4-5. (Canceled)
6. (Currently Amended) The composition as claimed in claim ~~5~~ 1, wherein the oligomer and the polymer (A) are (meth)acrylate copolymers.
7. (Currently Amended) The composition as claimed in claim 1, wherein the molar ratio of epoxide groups (a1) to hydrolyzable silane groups (a2) in ~~an~~ the oligomer or polymer (A) is from

1.5 : 1 to 1 : 1.5.

8. (Previously Presented) The composition as claimed in claim 1, wherein the hydrolyzable silane groups (a2) have the general formula II:



in which the indices and variables are defined as follows:

R is a monovalent hydrolyzable atom or monovalent hydrolyzable group;

R¹ is a monovalent nonhydrolyzable radical;

m is an integer from 1 to 3, and

n is 0 or 1 or 2

with the proviso that m + n = 3.

9. (Previously Presented) The composition as claimed in claim 8, wherein the monovalent hydrolyzable atom R is selected from the group consisting of hydrogen, fluorine, chlorine, bromine, and iodine and the monovalent hydrolyzable group R is selected from the group consisting of hydroxyl groups, amino groups -NH₂, and groups of the general formula III:



in which the variables are defined as follows:

X is selected from the group consisting of oxygen atom, sulfur atom, carbonyl group, carboxyl group, thiocarboxylic S-ester group, thiocarboxylic O-ester group and amino group -NH- or -NR¹-,

R¹ is a monovalent organic radical comprising at least one of substituted aryl groups and unsubstituted aryl groups, alkyl, alkenyl or alkynyl groups selected from the group consisting of substituted, unsubstituted, branched, unbranched, cyclic and noncyclic groups.

10. (Currently Amended) The composition as claimed in claim 1 comprising oligomer and polymer (A) are prepared by copolymerizing at least one monomer (a1) containing at least one epoxide group (a1) with at least one monomer (a2) containing at least one hydrolyzable silane group (a2).
11. (Previously Presented) The composition as claimed in claim 10, wherein the monomers (a1) and (a2) are copolymerizable with at least one further monomer, (a3) other than (a1) and (a2).
12. (Previously Presented) The composition as claimed in claim 10, wherein the monomers (a1), (a2), and (a3) contain at least one olefinically unsaturated group.
13. (Previously Presented) The composition as claimed in claims 10, wherein the olefinically unsaturated groups are at least one of methacrylate or acrylate groups.
14. (Previously Presented) The composition as claimed in claim 10, wherein the oligomer and the polymer (A) are prepared by free-radical copolymerization of the monomers (a1), (a2), and (a3).
15. (Currently Amended) The composition as claimed in claim 10, wherein the monomer ratio, on a molar basis, of monomer (a1) to monomer (a2) is from 1.5:1 to 1:1.5.
16. (Withdrawn) A process for preparing the composition as claimed in claim 1, which comprises at least one of hydrolyzing or condensing the oligomers and/or polymers (A) at a pH < 7.
17. (Withdrawn) The process as claimed in claim 16, wherein the at least one of hydrolysis or condensation is conducted in the presence of an organic acid.
18. (Withdrawn) The process as claimed in claim 16 or 17, wherein the at least one of hydrolysis or condensation is conducted at from -10 to +50°C.
- 19-20. (Canceled)

21. (Previously Presented) The composition according to claim 1, wherein the (meth)acrylate copolymer (A) contains at least one of lateral or terminal epoxide groups (a1) and at least one of lateral or terminal hydrolyzable silane groups (a2) of the general formula II:



in which the indices and variables are as defined as:

R is a monovalent hydrolyzable atom or monovalent hydrolyzable group;

R¹ is a monovalent nonhydrolyzable radical;

m is an integer from 1 to 3, and

n is 0 or 1 or 2

with the proviso that $m + n = 3$,

in a molar ratio (a1):(a2) of from 1.5 :1 to 1:1.5.

22. (Canceled)

23. (Previously Presented) The composition of claim 1 wherein the nanoparticles are cationically stabilized.

24. (Currently Amended) A ~~composition~~ composition comprising at least one of hydrolysates or condensates of epoxy-and silane-functional oligomers and polymers, prepared by at least one of hydrolyzing or condensing at least one of an oligomer or polymer (A), wherein the oligomer or polymer (A) is selected from the group consisting of copolymers of olefinically unsaturated monomers, containing at least one epoxide group (a1) and at least one hydrolyzable silane group (a2), wherein the number-average molecular weight of the oligomer or polymer (A) is from 800 to 3000 daltons, and ~~wherein the composition is characterized in being prepared~~ hydrolyzing or condensing is conducted in the presence of nanoparticles having a primary particle size of from 5 to 50 nm, which nanoparticles are the nanoparticles are cationically stabilized oxides, oxide hydrates, or hydroxides of aluminum or silicon ~~metals of oxides, oxide hydrates, sulfates, hydroxides or phosphates oxides, wherein the metals are selected from the group consisting of boron, aluminum, gallium, silicon, germanium, tin, arsenic, antimony, silver,~~

~~zinc, titanium, zirconium, hafnium, vanadium, niobium, tantalum, molybdenum, tungsten, and cerium, and wherein the hydrolysis and/or condensation takes place in a sol-gel process by reaction with water in the presence of an organic or inorganic acid.~~

25. (Currently Amended) The composition of claim 24 wherein the nanoparticles are cationically stabilized oxides, oxide hydrates, or hydroxides of aluminum ~~or silicon~~.

26. (New) The composition of claim 25 wherein the hydrolysis and/or condensation takes place in a sol-gel process by the reaction with water in the presence of acetic acid.